

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	) Group Art Unit: 1614
	)
HWANG, Jae-Kwan, et al.	) Examiner: RAO, SAVITHA M
	)
Serial No.: 10/585,553	) Confirmation No.: 4188
	)
Filed: September 27, 2007	)
	)
For: METHOD AND COMPOSITION FOR	)
TREATING ACNE USING LIGNAN	
COMPOUNDS	

**DECLARATION SUBMITTED UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Jae-Kwan HWANG of Dahlvit maeul Apt. #109-604, 858 Hwajeong-dong, Deokyang-gu, Goyang, Gyeonggi-do 412-270 Republic of Korea, do hereby declare the following:

I graduated from Rutgers, the State University of New Jersey with Ph.D. degree in 1991;

I am a professor in the Department of Biotechnology of Yonsei University, Republic of Korea.

As attested by my *curriculum vitae* attached hereto, I am knowledgeable and skilled in the field of Biology.

I am an inventor in the above-identified application Serial number: 10/585,553.

I have read and understand the subject matter of the Office Action of January 03, 2011.

The following comments are offered in support of the patentability of the instant invention, particularly, in connection with 35 USC § 112.

## 1. Materials and methods

### Determination of minimum inhibitory concentration (MIC)

A 96-well round-bottom microtiter plate, each filled with 100  $\mu$ L of respective broth, was used to measure MIC. Samples (0.001 g) dissolved in 1% DMSO were added to the first well and serially diluted with two-fold dilution method to give a concentration range of 500 to 1  $\mu$ g/mL. A bacterial suspension (100  $\mu$ L) containing  $2 \times 10^5$  colony forming units (CFU)/mL was added to each well and incubated at 37°C for 24 h. MIC was determined by judging visually the bacterial growth in the series of wells. The control included an inoculated growth medium without the test compounds and some commonly available antibacterial agents used for acne control were employed as positive controls. All experiments were performed in duplicate and the average values were reported as MIC.

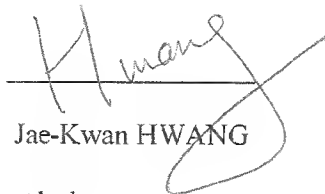
## 2. Results

**Table 1. MIC of various compounds against *Propionibacterium acnes***

Compounds	MIC( $\mu$ g/mL)
Machilin A	500
Macelignan	2
<i>meso</i> -dihydroguaiaaretic acid	16
nordihydroguaiaaretic acid	16

The undersigned hereby declares that all statements made herein based upon knowledge are true, and that all statements made based upon information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

DATED: June 23, 2011

  
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Jae-Kwan HWANG  
<declarant>